Utah Policy to Advance Energy Efficiency in the State

This policy is designed to increase energy efficiency in the State of Utah. The policy is directed at improved energy efficiency in state facilities and provides for methods to collaborate and support private sector initiatives. Currently the State spends $60 million dollars annually on energy; defining methods and programs to manage and improve energy usage are warranted. Support of private sector initiatives will further enhance the economic benefit to the State of greater energy efficiency and will improve Utah's economic competitiveness.

Role of State Government

State Government will:

1) Demonstrate leadership by promoting energy efficiency, energy efficient products, use of renewable energy, and fostering emerging technologies by dramatically increasing energy efficiency in all facets of State government.
    - The scope of programs will include all state-owned buildings and institutions
    - Programs will be long-term and comprehensive
2) Collaborate with utilities, regulators, legislators, and other stakeholders to advance energy efficiency in all sectors of Utah's economy.
3) Work with stakeholders to identify and address regulatory barriers to increased deployment of energy efficiency.
4) Work to identify and address legislative barriers and disincentives to increased deployment of energy efficiency.
5) Educate government agencies and the public and private sectors about the benefits and means to implement energy efficiency.

Elements of State Energy Efficiency Plan

1) **Make Energy Efficiency a Priority for Utah and Set Energy Efficiency Goals for the State of Utah**
    a. The Western Governor's Association has set a goal of 20% increase in energy efficiency by 2020.[1] Utah will work to meet this goal in advance of this target with an objective date of 2015, thereby saving Utah's citizens and businesses energy and money.
    b. The American Institute of Architects (AIA) recently called for architects to reduce usage of fossil fuels in the construction and operation of new buildings of 50% by 2010. The State will cooperate with AIA in meeting their goals in Utah.
    c. Encourage energy efficiency in Utah's manufacturing, industrial and agriculture sectors.
    d. Encourage efficiency in energy generation and distribution. The state will encourage utilities and other energy producers and distributors to seek cost effective methods to reduce energy losses in the production and distribution of energy.

Saving Energy and Money in State-owned Buildings

2) **Advanced Building Design Standards for State-Owned Buildings**

[1] Western Governors' Association, Policy Resolution 04-14 Clean and Diversified Energy Initiative for the West, June 22, 2004, Santa Fe, New Mexico, http://www.westgov.org/wga/policy/04/clean-energy.pdf

a. The State will expand current energy design standards administered by the Division of Facilities and Construction Management (DFCM) in the Department of Administrative Services (DAS). The current level calls for 10% lower than a code minimum building. An advisory group composed of representatives from state agencies and institutions will assist in setting goals and the development of three programs for capital improvement and new construction of State-owned buildings:

    i. Energy Efficient Products, a program that incorporates and standardizes energy efficient products and equipment in State buildings
    ii. Energy Design Standards, which sets the minimum requirement for energy design of the building envelope, mechanical systems, lighting systems, service water heating, power, and other equipment
    iii. High Performance Building Rating System, a program that promotes energy efficiency, water conservation, indoor environment improvements, and sustainability through market transformation in new construction and major renovations.

b. The State will enhance quality control, accountability and training to ensure State government reaps the savings of the Advanced Building Design Standards.
    i. The State will work with communities to enhance training and accountability

3) Energy Efficiency for State-Owned Buildings

a. The State will establish an energy efficiency advisory group, composed of state administrators and staff from respective state agencies, as a forum to share knowledge and experience in the design and implementation of energy efficiency programs.
    i. Utility Energy-Efficiency Contract, a demand side management services provided by Utah Power to improve the efficiency of use of electricity in State buildings.
    ii. Energy-Savings Performance Contract, a contract that provides performance of services for the design, acquisition, financing, installation, testing, operation, and other services. Payment to the contractor is realized through a guaranteed stream of future energy and cost savings.
    iii. Energy Efficiency Projects, which result in cost effective savings of commodities (electricity, gas, water, etc.) in State buildings. Funding of these projects will be obtained from the Capital Improvement funds and other funding mechanism. Programs will build on currently established third party standards, such as the US EPA's Energy Star Program.
    iv. Re-commissioningvbvProgram, a program to tune-up mechanical systems and optimize efficiency in State buildings.
b. The state will consider a process where all capital improvements for existing State-owned buildings are explicitly reviewed for energy impacts.
c. All state buildings should have the most efficient lighting installed. Through the state, we will work to establish an aggressive timeline for incorporating efficient lighting in the state's 42 million square feet of floor space.
d. Agencies and institutions with authoritative responsibility to implement energy-saving programs for buildings shall request funding from the legislature necessary to achieve the goals of this policy. To reduce the state's obligations, the agencies shall seek other funding sources including funds from Utility Energy-Efficiency Contracts, Federal Grants, Energy-Savings Performance Contracts, Petroleum Violation Escrow Fund (PVE), and other private funding sources.

e. The State will enhance the State Buildings Energy Efficiency Program (SBEEP) through DFCM by (1) funding additional staff and (2) assigning responsibility and accountability for design and implementation of programs to DFCM.
f. Efforts will enhance our education programs, such as the Building Operators Certification Partnership.

4) Energy Standards for K-12 Schools

a. The State will work with the Board of Education to design a peer review of public schools to assess energy efficiency potential and create means to increase efficiency in new and existing schools.

5) Energy Efficiency for State Transportation

a. The State will continue to use fuel-efficient vehicles, such as compressed natural gas and hybrids, within the State fleet and look to identify other efficient supply alternatives.
b. The State will work with local entities (fueling stations, natural gas suppliers) to enhance the provision of natural gas fuel stations throughout the State.
c. The State will encourage the Legislature to continue to help state agencies subsidize state employee use of public transportation through the eco-pass program.
d. The state will give priority to locating new state facilities near light rail and commuter rails lines to provide better access for state employees to public transportation.

6) On-Site Renewable Energy and Combined Heat and Power

a. State government will establish programs to install on-site renewable energy sources to reduce energy consumption by 2% by 2015 compared to 2005 levels (We will work through the advisory committee to refine these goals). In particular, the state will require that distributed renewable self-generation options be evaluated in all new state building designs and retrofits.
b. Currently the Governor's office, in coordination with Utah Geological Surveys (UGS) and the State Energy Program (SEP), is assisting in the funding of a 1.28-kw solar power and demonstration project on the Department of Natural Resources (DNR) facility located on North Temple in Salt Lake City.
    i. The state is also supporting with funding and in partnership with other entities the installation of solar projects at State Parks.
c. The State will encourage and implement combined heat and power, where feasible.

<u>Energy Efficiency in the Private Sector</u>

7) Collaborate with Utilities, Regulators, and Private Sector

a. To identify and remove barriers
b. To create or expand efficiency programs
c. To assist utilities in ensuring that efficiency programs are effective, attainable, and feasible to implement.
d. The state will facilitate development of high efficiency energy resources, electrical generation, transmission and distribution systems that will provide cost effective, clean and sustainable energy to end users.
e. Encourage efficiency in Utah industry and manufacturing
    i. Work with Utah Industries of the Future to promote education and training activities from the US DOE Energy Efficiency and Renewable Energy (EERE) and Office of Industrial Technology program, the US Department of Agriculture and the US Environmental Protection Agency Energy Star program.
    ii. Promote cooperation and coordination between The State of Utah's economic development activities and energy efficiency resources such as utility programs, educational activities and public-private sector initiatives that support efficiency.

f. Encourage efficiency in transportation sector
    i. Incentives for clean and fuel-efficient vehicles
    ii. Support of and funding for public transportation improvements

8) Improve Building Code Requirements, Compliance, Training and Enforcement

a. In coordination with other efforts in the state, we will commission a Baseline Energy Study for residential and commercial building sectors to characterize the building stock, identify shortfalls in compliance with the Energy Codes, benchmark policy goals, and provide recommendations to capture energy savings from deficits and to promote additional energy savings beyond code. The Baseline Energy Study shall be repeated every three years in sequence with the adoption of new energy codes.[2]
b. Ongoing training and education of building inspectors
c. Ensure adequate funding is available to achieve building code enforcement
d. Encourage private sector builders to exceed energy efficiency codes by promoting the use the State's Advanced Building Design Standards.

9) Develop Policies to Implement Goals of State Energy Efficiency Plan

a. **The state will work with local and county governments to share ideas and evaluate policy options and goals.**

10) Energy Efficiency Education and Outreach

b. On-Going Training and Education of Architects, Contractors, Engineers, and Building Maintenance
    i. Training Building Officials
    ii. Training with ASHRAE for engineers and architects (currently coordinating with SEP to deliver Energy Code on May 4-5, 2006)
    iii. For operational improvements in new buildings the State will work to develop a training program for building managers, operators and project managers to educate facilities personnel in the energy and resource efficiency operation and maintenance of buildings systems(e.g. Building Operator Certification Program is offered by the Northeast Energy Efficiency Partnership)
c. General Public Outreach and Education

[2] As part of the merger commitments, MidAmerican has committed to do market potential study for energy efficiency within 15 months of the close of the merger. To avoid duplication of efforts, I recommend that the state work coordinate with this study and other studies that may be moving forward in the state.